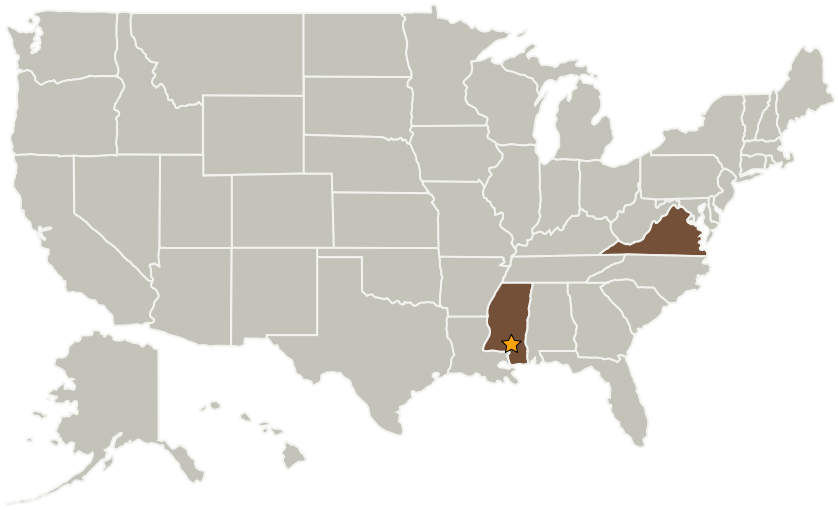
Wireless Sensor Portal Technology, Phase II

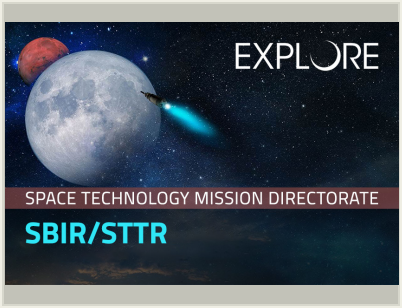
Completed Technology Project (2004 - 2006)

Project Introduction

Mobitrum Corporation has demonstrated the feasibility in the Phase I of " A Wireless Sensor Portal Technology" and proposes a Phase II effort to develop a wireless portal device with Ultra-wideband transceiver targeted for NASA's Earth Science applications, Rocket Propulsion testing, and Center Management and Control for field personnel to send/receive digital and analog data from various sensors for data input, analysis and distribution purposes. This effort addresses an important NASA technology gap for integrating a system together to link distributed sensors, data acquisition devices, and center control and management. This effort will include: 1) Wireless sensor portal hardware fabrication; 2) Ultra-wideband sensor module and mini-PCI circuitry design; 3) Ultra-wideband sensor module and mini-PCI hardware fabrication; 4) Hardware integration and testing; 5) Software development and testing; and 6) System integration and testing. The proposed enabling technology will provide NASA a wide range of capability including distributed sensing, monitoring, tracking, and data acquisition. The wireless portal technology will provide an effective tool for Earth Science, Rocket Propulsion Testing, and Data relay for environmental and other sensors for situational awareness.

Primary U.S. Work Locations and Key Partners





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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Stennis Space Center (SSC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Organizations Performing Work	Role	Type	Location
★Stennis Space Center(SSC)	Lead Organization	NASA Center	Stennis Space Center, Mississippi
Mobitrum Corporation	Supporting Organization	Industry	McLean, Virginia

Primary U.S. Work Locations	
Mississippi	Virginia

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX13 Ground, Test, and Surface Systems
  - TX13.2 Test and Qualification
    - TX13.2.7 Test Instruments and Sensors